Machine Learning for Radiometer Calibration

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ML calibration overview

images_compressed/ml_overview.pdf

Testing on internal validation source

images_compressed/temps.pdf

Neural Network Time Evolution

images_compressed/nn_time.pdf

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Modeling environmental features

 ${\tt images_compressed/nn_time_tpm.pdf}$

We can train on features that cannot be modeled analytically

Conclusions

Component Modelling

Learn the effect of complex internal components such as switches, cables, etc

Temporal Dynamics

Learn time dependant system behaviour

Extended Inputs

Train on non-standard inputs, such as box temperature